



Montana Fish, Wildlife & Parks

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September 13, 2000

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Mt Historical Society, State Historic Preservation Office, 225 North Roberts, Veteran's Memorial Bldg., Helena 59620
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Flathead County Commissioners, 800 S. Main, Kalispell, 59901
Rep. Verdell Jackson, 555 Wagner Lane, Kalispell, 59901
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Stan Frasier, PO Box 5841, Helena, 59604
Dennis Brown, 255 Lost Creek Drive, Kalispell, 59901
C. W. Ingham, 805 Spring Prairie Road, Whitefish, 59937
Dave Dittloff, MT Wildlife Federation, PO Box 1175, Helena, 59624

Ladies and Gentlemen:

Montana Fish, Wildlife & Parks has completed the Final Environmental Assessment and the proposed Decision Document for the BCD Land & Livestock alternative livestock facility expansion license. Copies are enclosed for your information.

Sincerely,

Dan Vincent
Dan Vincent
Regional Supervisor

DV/nli
Enclosures

**TUTVEDT'S BCD LAND & LIVESTOCK
ALTERNATIVE LIVESTOCK EXPANSION
DECISION DOCUMENT**

SEPTEMBER 12, 2000

Alternative Livestock Application and MEPA Review.

Montana Fish, Wildlife and Parks (FWP) received an application dated April 14, 2000 from Brian, Craig and David Tutvedt to expand their alternative livestock facility in Flathead County, Montana. FWP received the application on April 18, 2000 and accepted the application as complete in a letter to the Tutvedts dated May 16, 2000. The proposed expansion of the BCD Land & Livestock alternative livestock facility is located between the towns of Whitefish and Kalispell, Montana (approximately 7 miles northwest of Kalispell and 10 miles southwest of Whitefish). The property is located less than 1 mile from the Stillwater River. Relatives of the applicants live adjacent to the proposed expansion site.

The purposes of the facility would be for breeding stock, meat, and antler production. The proposal does not include fee shooting of alternative livestock at the facility. The proposed 82 acre expansion would be directly adjacent to an existing alternative livestock facility of 38 acres that is licensed for up to 200 elk in portions of Sections 3 and 4, Township 29 North, Range 22 West. An EA and Decision Document were prepared by FWP in 1997 for the existing 38-acre alternative livestock facility.

The applicants propose that up to 600 alternative livestock (elk) be allowed in the 120 acre enclosure (proposed 82 acre enclosure and existing 38 acre facility) on a year-round basis. The expansion is proposed in 2 phases (Phase 1 = 34 acres and Phase 2 = 48 acres), which would be completed by the fall of 2003. All animals would be acquired from licensed facilities, although none have been specifically identified at this time.

Fence construction would be completed in accordance with requirements of FWP under ARM 12.6.1531. Fencing would consist of 8-foot high, high tensile, Tightlock steel fencing on steel posts. The fence bottoms would be installed to provide not more than 3 inches of ground clearance. Five exterior gates would be constructed for the proposed expansion fence. A handling and quarantine facility at the existing 38-acre facility would also be used for the proposed expansion. Water for the proposed expansion would come from a well that supplies the existing facility.

FWP and the Montana Department of Livestock (DoL) prepared a draft Environmental Assessment (EA) pursuant to the Montana Environmental Policy Act (MEPA) and Alternative Livestock statutes. This document was distributed for public review and

comment on August 10, 2000, with comments accepted through August 31, 2000. No public hearings regarding this proposed expansion were conducted.

FWP received 2 written public comment submittals during the comment period. Issues raised included risk of disease (especially Chronic Wasting Disease), effects on water, ethics and hunting traditions, stocking rates, and fencing issues. These comments were collected and sorted by Maxim Technologies, Inc., Helena, MT, with responses to specific issues prepared by Maxim, FWP, and DoL. A summary of the specific issues raised and resulting responses is included in the Final EA.

Upon completion of the EA, it was determined that a full Environmental Impact Statement (EIS) would not be required. No significant impacts from the proposed action were identified that could not be mitigated. A copy of the Final EA is attached.

Proposed Decision:

Based upon our review of the EA, the license application file, and the information noted below, FWP has determined that a license to operate the alternative livestock facility in question will be issued. The issuance of this license is contingent upon approval of all fence construction and the Licensee's adherence to the stipulations listed below. The Licensees will have 3 years from the date of this approval to complete all fence construction as submitted in this application. Changes from the application must be approved by FWP prior to implementation of modifications.

The Licensees must be in compliance with all Alternative Livestock statutes, rules, and regulations of Montana Fish, Wildlife and Parks and Department of Livestock. Current regulations are attached for the applicant's information, but it is the Licensee's responsibility to keep up with any changes in the laws or regulations. The Licensees must also comply with the stipulation listed below.

With most alternative livestock facilities, there is a concern of disease transmission to wild populations, and also genetic 'pollution', should wild and captive animals interbreed. Wild animals, such as native elk, black bears, mountain lions, and coyotes, can be attracted to elk facilities due to the availability of food and potential breeding opportunities. Responsible management and adherence to FWP stipulations and regulations will reduce the risk of contact between wild game and captive elk to an acceptable level. The EA recommends additional measures, which should assist in that effort.

The proposed expansion will exclude wildlife from using 82 acres of agricultural land if both phases are constructed. Given the total size of the proposed enclosure (120 acres), the impact from the loss of habitat was not considered significant.

Any potential impacts on water quality not addressed herein can be mitigated by the applicant's compliance with the state's water quality standards and requirements. Point source discharges, which include operations qualifying as concentrated animal feeding operations, are regulated under Title 75, Chapter 5, Part 6, MCA and ARM 16.20.1301, et. seq., and may require permits, especially if animal numbers result in significant loss of vegetation. Nonpoint source discharges are regulated under the prohibitions against the pollution and nondegradation of state waters (Title 75, Chapter 5, Parts 3 and 6, MCA and ARM 16.20.701 et. seq.). Nonpoint sources of pollution are considered non-significant sources of degradation where reasonable land, soil, and water conservation practices are applied and existing, and anticipated beneficial uses will be fully protected (ARM 16.20.713). The Department of Environmental Quality has the authority to determine whether an activity satisfies these standards (ARM 16.20.709).

The accumulation of packed snow and other factors increase the risk of ingress and egress associated with most alternative livestock facilities. FWP requires the immediate notification of the ingress or egress of any wild or captive ungulate in order to assess the adequacy of fencing requirements. This should help to address problems early and may result in additional modifications to fence design.

The Department has the duty under the Montana Environmental Policy Act to conduct an additional environmental review if the action approved by the agency changes, subsequent to the agency's original approval, in a manner which has impacts substantially different from those which were reviewed in the original MEPA review (Ravalli County Fish and Game Association v. Montana Department of State Lands, 273 Mont. 371, 903 P.2d 1362 (1995)). For that reason, the Department provides notice that the MEPA review performed for this license application reviewed the impacts of an alternative livestock expansion with a total of up to 600 elk on 120 acres. To the extent that the applicant hereafter increases the number of species of animals or makes other significant changes to the operation, a supplemental MEPA review must be conducted.

License Stipulations:

The following requirements, which have been agreed to by the applicants, are imposed by FWP for Tutvedt's BCD Land and Livestock expansion and are designed to ensure that the fence enclosure is maintained in game-proof condition:

- (1) Licensee shall inspect the perimeter fence on a regular basis. If ingress or egress becomes a problem due to excessive snow accumulation or differential slope heights along the perimeter fence, fence height shall be increased a minimum of 10 feet in the identified problem area.

The stipulation listed above is imposed to mitigate a potentially significant risk from ingress/egress of alternative livestock and wildlife due to fence height concerns from

hillsides and potential snow accumulation. Some moderately steep (20-30%) slopes exist in the northeast and south-central portions of the proposed enclosure. Typically, winter snow depths in this area can reach several feet, but are rarely more than 1 to 2 feet at any given time. Blowing and drifting snow can also increase packed snow depths. Excessive snow accumulation along exterior fences should be plowed to reduce risk of ingress/egress. Without the above stipulation, risk to livestock and wildlife from contact with alternative livestock would have the potential to be significant.

Recommended Mitigation Measures:

The following list of recommended mitigation measures have been agreed to by the applicants and will be incorporated into the license requirements. They address minor impacts identified in the Tutvedt BCD Land and Livestock proposed expansion alternative livestock EA; for a complete list of all mitigation measures, see the check-list portion of the Draft EA:

- Maintain a reasonable stocking rate in the proposed facility to mitigate potential impacts from erosion and fecal matter. Employ one or more of the following best management practices (BMPs) to reduce odor problems if they occur; quickly incorporate accumulated waste into the soil by plowing or disking as appropriate; spread waste during cool weather or in the morning during warm, dry weather; properly dispose of animal carcasses according to county solid waste regulations; carcasses and fecal material should not be disposed of in, or adjacent to, water bodies, roads and ditches; and reduce stocking rate of alternative livestock.
- Store feed away from exterior fences or enclose in containers or buildings, and feed alternative livestock at interior portions of the enclosure and not along the perimeter fence.
- Remove dead animals or bury on-site according to DoL regulations. Removed carcasses should be deposited at a site not likely to be used by humans, wildlife, or domestic animals. On-site disposal of dead alternative livestock is regulated by DoL under ARM 32.4.1002.
- For areas that may have erosion and sedimentation problems, utilize BMPs where surface water could enter the Stillwater River. The BMPs may include earth berms, straw bales dikes, vegetative buffer zones, and/or silt fences to be used on a seasonal basis. The booklet "Common Sense and Water Quality, a Handbook for Livestock Producers" (Montana Department of Health and Environmental Sciences, 1994) is recommended for further mitigation measures.
- Monitor the alternative livestock site for invasion of noxious weeds, and treat affected areas in a timely manner. Should noxious weeds continue to be detected,

a weed control program should be implemented, if not already in place, to control the weeds.

- Provide certified weed-free supplemental feed and minerals to the alternative livestock on a seasonal basis to reduce excessive grazing on preferred pasture plants.
- Create/utilize interior pastures such that rotational grazing strategies can be implemented to reduce adverse impacts on vegetation, minimize changes in soil structure and potential increases in runoff and erosion to surface water drainages from disturbed ground.
- Minimize risk of disease epidemic or heavy parasite infections among alternative livestock by maintaining a reasonable stocking rate in relation to enclosure size, periodic removal of manure from concentration areas, and development of a disease immunization and parasite treatment protocol as applicable to alternative livestock.
- It is recommended that several strands of electrified wire be installed around the circumference of the enclosure with 1 across the top. Should a predator or unwanted domestic dog gain access to the facility and spook the elk, the resulting strain on the fence from such a large number of elk would be excessive.
- If archaeological artifacts are observed during construction of the enclosure fence or other activities, stop work in the area and report the discovery to the Montana Historical Society; Historic Preservation Office, (406) 444-7715. If work stoppage in the area containing observed artifacts is not possible, record the location and position of each object, take pictures, and preserve the artifact(s).

Daniel P. Vincent
Daniel P. Vincent
Regional Supervisor *by Jim VanLan*

9/13/00
Date

Brian Tutvedt
License Applicant

Date

Craig Tutvedt
License Applicant

Date

David Tutvedt
License Applicant

Date

Please sign the document and return the original to FWP to indicate your concurrence with the license stipulations and recommended mitigation measures listed above. A copy of the signed decision will be provided to you for your records.

Mail to: Nancy Ivy, MFWP Region One, 490 North Meridian Rd., Kalispell, MT
59901

FINAL ENVIRONMENTAL ASSESSMENT EXPANSION OF TUTVEDT'S BCD LAND & LIVESTOCK ALTERNATIVE LIVESTOCK OPERATION

MONTANA ENVIRONMENTAL POLICY ACT (MEPA) PROCESS

Montana Fish, Wildlife & Parks (FWP) is required to perform an environmental analysis in accordance with the Montana Environmental Policy Act (MEPA) for "each proposal for projects, programs, legislation, and other major actions of state government significantly affecting the quality of the human environment" (Administrative Rules of Montana [ARM] 12.2.430). FWP prepares an environmental assessment (EA) to determine whether a project would have a significant effect on the environment.

The people of Montana, through our legislature, have determined that the alternative livestock industry is appropriate in Montana. It is understood that this carries with it some risk that cannot be reduced to zero. The level of risk that a particular project may introduce must be evaluated by FWP (through the MEPA process) using legislative intent, the negotiated rules and standards therein, as well as established practices that have been demonstrated to be sufficiently effective measures for similar conditions elsewhere.

If, using the above parameters, FWP determines that a project would have a significant impact that cannot be mitigated to a minor impact, the agency will prepare a more detailed environmental impact statement (EIS) before making a decision. If the agency determines that a proposed project will not have a significant impact, or that the impact can be mitigated to minor or none, the agency may make its licensing decision based upon results of the EA and criteria established under Montana alternative livestock statute, Montana Code Annotated (MCA) Title 87, Chapter 4, Part 4.

Mitigation measures may be considered in FWP's analysis as a means to reduce impact(s) of an alternative livestock ranch to a level below significance. FWP may also recommend mitigation measures to reduce impacts that are considered minor. FWP prepared a Draft EA for the proposed expansion of the Tutvedt BCD Land and Livestock Alternative Livestock Operation, which identified no significant impacts from the Proposed Action that could not be mitigated. The Draft EA was released for public review and comment August 10, 2000. Public comments were accepted through August 31, 2000.

The Draft EA also provided an analysis of impacts to private property by proposed stipulations in the EA as required under 75-1-201, MCA, and the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The analysis provided in the Draft EA was conducted in accordance with implementation guidance issued by the Montana Legislative Services Division (EQC 1996).

The Draft EA, as modified herein, and this Final EA are hereby approved as the Final EA. This Final EA for the proposed expansion to the the Tutvedt BCD Land and Livestock Alternative Livestock Operation contains summaries of the Proposed Action, affected environment, and potential consequences of the Proposed Action, all of which are described in additional detail in the Draft EA, which is adopted in this Final EA. This document also describes mitigation measures and requirements, includes a summary of substantive public comments and agency responses to those comments, and provides the conclusion of the EA. The preferred alternative is the Proposed Action with one requirement and several recommended mitigation measures.

PRIOR ENVIRONMENTAL REVIEW AND LICENSE

The existing 38-acre alternative livestock facility owned and operated by the Tutvedts was subject to an EA completed by FWP in 1997. The EA included an evaluation of potential impacts to the physical

environment and human environment. A Decision Document was completed by FWP on October 14, 1997 to allow up to 200 elk in the 38-acre enclosure. License no. 132 was granted to Brian, Craig, and David Tutvedt for the 38-acre alternative livestock facility. One stipulation is included with the Decision Document and license:

1. Licensee must report to FWP the ingress of any game animal or any predators of ungulates (e.g., mountain lion, black bear, grizzly bear or wolf) immediately upon the discovery, and the reason for such ingress.

Key environmental impacts noted in the EA for the 38-acre BCD Land & Livestock alternative livestock operation include the following:

- Spread of a contagious wildlife disease from alternative livestock may reduce the number of wild deer and elk.
- The enclosure may alter local movement of some individual wild deer or transitory elk. Wild deer could enter the enclosure during periods of drifted or otherwise deep snow accumulations.
- Potential for minor impacts to surface water and groundwater quality from elk fecal matter and sediment in the vicinity of the alternative livestock facility, including a wetland area within the enclosure.
- Decreasing forage availability, reduced ground cover, increased soil erosion, and invasion of noxious weeds if intensity of stocking rate is high (i.e., up to 200 elk on 38 acres).

PROPOSED ACTION

FWP received an initial application dated April 14, 2000 from Brian, Craig, and David Tutvedt to expand their alternative livestock facility in Flathead County, Montana. FWP received the application on April 18, 2000, and accepted the application as complete in a letter to the Tutvedts dated May 16, 2000. The proposed expansion to the BCD Land & Livestock alternative livestock facility is located between the towns of Kalispell and Whitefish, Montana (approximately 7 miles northwest of Kalispell and 10 miles southwest of Whitefish) (Figure 1). Relatives of the applicants live adjacent to the proposed expansion site.

The proposed expansion site is located immediately south of the existing licensed alternative livestock facility (license no. 132). The proposed alternative livestock expansion is located in the SW¼ of Section 3 and SE¼ of Section 4, Township 29 North (T29N), Range 22 West (R22W) and would add 82 acres to the existing 38-acre facility. The existing facility is licensed for up to 200 elk in the same sections listed above.

The applicants propose that up to 600 domestic elk be allowed in the 120-acre enclosure (proposed 82-acre enclosure and existing 38-acre facility) on a year-round basis. The expansion is proposed to be completed in two phases: Phase 1 = 34 acres, and Phase 2 = 48 acres, both of which are expected to be completed by the fall of 2003.

Purposes of the proposed alternative livestock facility include: breeding stock, meat production, and antler production. According to the applicants, no public shooting of alternative livestock would be allowed in the enclosure. Alternative livestock to occupy the expanded facility would be procured from licensed facilities; however, none have been identified at this time. Wild animals would be removed from the enclosure by the applicant prior to licensing by FWP.

Fence construction would be completed in accordance with requirements of FWP under ARM 12.6.1531. Fencing would consist of 8-foot high, high-tensile, Tightlock steel wire fencing on steel posts. The fence

bottoms would be installed to provide not more than 3 inches of ground clearance. Five exterior gates would be constructed for the proposed expansion fence (Phases 1 and 2). A handling and quarantine facility located in the existing 38-acre alternative livestock facility would be used for the proposed new facility. Water for the proposed expansion would come from a well that also supplies water for the existing facility.

ALTERNATIVES

One alternative (No Action Alternative) is evaluated in this EA. Under the No Action Alternative, FWP would not issue a license for expanding the existing 38-acre BCD Land & Livestock alternative livestock operation as proposed. Therefore, no alternative livestock would be placed in the proposed enclosure. Implementation of the No Action Alternative would not preclude other activities allowed under local, state, and federal laws to take place at the proposed alternative livestock site.

AFFECTED ENVIRONMENT

The proposed Tutvedt expansion of the BCD Land & Livestock alternative livestock facility is located on leased land between Kalispell and Whitefish, Montana. The proposed 82-acre expansion site (site) is located at an elevation of about 3000 feet in the Stillwater River drainage. The river is approximately ¼-mile east and north of the proposed enclosure. Approximately three-quarters of the proposed site is situated on level ground, while the remaining area is a moderately sloping (20 to 30 percent) hillside. General topography of the area was formed by glaciers and subsequent alluvial features produced as the ice melted and retreated. The glacial features include the Lost Creek outwash fan, kettle holes, swales, and hummocky topography characteristic of ground moraine. Soil at the site is primarily sand and silt loam with some clay.

The Stillwater River is the prominent hydrologic feature in the study area. A former channel of the river located about ¼-mile east of the site contains water year-round from springs and seeps. A spring/seep area and associated pond are located near the north side of the existing 38-acre enclosure; water from this seep drains to the former river channel and Stillwater River. No wetland areas are located within the proposed 82-acre expansion area. Stock water would be supplied to the alternative livestock from an existing well located near the enclosure; this water source is also used for the existing facility.

Direction of groundwater flow in the vicinity of the proposed alternative livestock facility is likely easterly toward the Stillwater River. Depth to unconfined groundwater in unconsolidated alluvial and glacial sediments along the valley bottom in the east side of the proposed enclosure is relatively shallow (10 to 50 feet). Due to shallow clay material, however, the primary water-producing zones are in deeper semi-confined and confined sand and gravel units at depths in excess of 200 feet below ground surface.

Montana's Section 303(d) list shows that the lower section of the Stillwater River adjacent to and downstream of the alternative livestock site (44.1-mile reach of B-2 use classification) is impaired for aquatic life, cold water fisheries, and drinking water. Several water rights are held for groundwater wells and surface water (primarily Stillwater River) within a mile of the proposed alternative livestock facility.

The 82 acres in the proposed BCD alternative livestock expansion area is irrigated cropland (barley/grass hay). No trees are located along the proposed perimeter fence. Forage production for the proposed expansion area is estimated at 5,000-8,000 pounds per acre per year due to irrigation; therefore, total forage for the proposed 82-acre enclosure would be in excess of 410,000 pounds (205 tons) on an annual basis. No federally-listed threatened or endangered plant species were observed within the proposed enclosure site. The proposed site does contain noxious weeds (e.g., Canada thistle).

The BCD alternative livestock site is located near white-tailed deer winter range and just within the edge of elk summer and winter habitat. This area, however, is not considered important wildlife winter range.

The Kuhns Wildlife Management Area, located ¾-mile to the northwest, and the Stillwater River, located about ¾-mile to the east-northeast, are important deer winter range. The general area of agricultural land surrounding the proposed enclosure is used by white-tailed deer during other seasons as well. Mule deer use the western portion of the white-tailed deer winter range, and moose frequent areas just west of the proposed enclosure area. These wild animals located outside of the proposed enclosure potentially could be subject to hybridization risk from the alternative livestock. Bald eagles, a federally-listed species, winter along the Stillwater River. Other wildlife species known or expected to use the area, at least on a transient basis, include black bear, mountain lion, coyote, and fox.

The existing 38-acre alternative livestock facility is located on the north side of the proposed expansion area. The area surrounding the proposed alternative livestock facility is sparsely populated. A relative of the applicants lives near the north side of the existing facility, and another house is located near the northwest corner of the proposed expansion area. Several other residences are scattered within a mile of the alternative livestock site.

Principal land use of the alternative livestock site and vicinity is livestock grazing and irrigated cropland. The proposed operation would be consistent with existing land uses and is surrounded by private residential and farmland. The Stillwater State Forest is located approximately 1 mile northeast and 1½ miles west-northwest of the proposed enclosure. The nearest federally owned land is National Forest located about 3 miles west of the site. There are several sparsely located residences (other than the one located at the alternative livestock site) located within one mile of the site. County roads extend along the east and south sides of the proposed enclosure. The proposed alternative livestock facility is located approximately 7 miles northwest of Kalispell and 10 miles southwest of Whitefish.

Traditional domestic livestock are currently pastured in the vicinity of the property. There are resident populations of elk and deer in the vicinity of the proposed enclosure. These domestic and wild animals located outside of the proposed enclosure potentially could be subject to disease transmission from the alternative livestock. In addition, several residents are sparsely located within a mile of the facility that could be indirectly exposed to health hazards from the proposed alternative livestock facility. In order for disease transmission to occur, the organism causing the disease needs to be present. Any alternative livestock introduced to this facility would be tested for tuberculosis and brucellosis and would be in compliance with DoL disease regulations (monitoring for chronic wasting disease, etc.) prior to movement to the facility.

CONSEQUENCES OF THE PROPOSED ACTION

Only primary resources with the potential to be adversely impacted by the Proposed Action are summarized in this section. A more detailed review of environmental consequences is contained in *Part II* of the Draft EA.

Impacts to Land, Water, and Vegetation Resources

Environmental impacts to land and soil resources associated with the Proposed Action of expanding the existing alternative livestock facility by 82 acres to accommodate up to 600 elk at full capacity are directly related to the stocking rate. The western portion of the proposed expansion area contains moderately-steep slopes (20 to 30 percent) where the soil, while somewhat resistant to erosion due to a considerable amount of gravel, would erode if an adequate vegetative cover is not maintained. The eastern portion of the proposed expansion is on more gentle slopes where wind erodibility is more of a concern on disturbed areas and areas where vegetative cover could be significantly reduced due to excessive grazing. Maintaining an adequate vegetative cover is integral to reducing potential impacts to soil productivity from erosion. This would be possible using irrigation in conjunction with a proper stocking rate.

Increased runoff and erosion could occur in some areas of the proposed enclosure if pasture use is such that vegetative cover is diminished. The proposal to pasture up to 600 alternative livestock on the site would reduce vegetative cover. Areas of the enclosure that would be most susceptible to erosion problems are on the steeper slopes (20 to 30 percent). The extent to which erosion would occur is dependent primarily on animal density, season, and duration of use. The exterior enclosure fence would not cross any perennial streams or ponds. Any runoff that may occur from the proposed enclosure would enter the ditch along the county road on the east side of the fenceline.

Alternative livestock fecal matter and nutrient-enriched water may have a minor effect on the quality of groundwater in the vicinity of the alternative livestock site (dependent upon animal density and waste management practices), primarily during periods of snow-melt and major precipitation events when recharge to the subsurface system would occur.

The occupancy period for alternative livestock would be on a year-long basis. The proposed site would supply an estimated 30 to 40 percent of forage needs when fully stocked with 600 animals. The maximum stocking rate of approximately 5 animals per acre is considered high and would contribute to the long-term decline of vegetation resources on the site, both in terms of plant species composition and productivity. Use of irrigation, however, would minimize impacts to vegetation. Supplemental feed (hay/grain) would be needed to sustain the animals during the non-growing season and some feed should be provided during the growing season to help reduce animal use of vegetation and to reduce potential impacts on ground cover. There are no native plants, including threatened or endangered plant species in this area.

Noxious weed spread is possible at this site and, under an intensive grazing regime, with no weed management, would be expected to invade and subsequently increase in abundance. Weeds would spread quickly to disturbed areas around any site that animals are fed or handled. Weed seeds could be imported into the area with animal feed. If BMPs are properly implemented and a reasonable stocking rate is maintained, impacts to vegetation would be minor.

Impacts to Air Resources

The presence of up to 600 alternative livestock in the 120-acre enclosure would produce some odors from fecal matter, but is expected to cause only minor odor problems to residences within about a ¼-mile radius of the facility. In general, the area is a sparsely populated, agricultural region.

Impacts to Wildlife Resources

The exclusion of wild game from 82 additional acres would displace a few resident deer and possibly elk from habitat in the drainage. Game moving through the area would be forced to travel a minimal distance to get to the same point(s) along the travel routes. Mountain lions, bears, and wolves would occasionally pass through this area and may be attracted to the alternative livestock.

A concern regards the escape of captive elk and the potential for interbreeding of wild elk with domestic elk whose genetic make-up has been altered through several generations of selective breeding or through interbreeding with domestic red-deer. Although red deer are now prohibited species in Montana, historically some alternative livestock operators did bring red-deer or red-deer hybrids into their facilities.

The concern regarding red deer hybrids is partially mitigated through current regulations. Although the impact of genetic pollution on wild elk herds is unknown, the effect is undesirable in terms of maintaining the genetic integrity of existing populations. The risk of hybridization would be minimal if fence integrity is maintained and the stipulations and/or mitigation measures described in this EA are followed.

Impacts to Noise

Minor increases to existing noise levels are expected as a result of constructing the fence and from bull

elk bugling during the mating season. Fence construction would be short-term. The magnitude of bugling noise would be dependent on the number of bull elk in the enclosure during the mating season.

Impacts to Land Use, Recreation, and Community

The proposed expansion would be compatible with existing agricultural land uses. The alternative livestock facility would maintain the 82-acre expansion area as forage cropland. With respect to land use, no significant conflicts should result between operation of the ranch and the agricultural or residential areas. Additional homes could be constructed in the vicinity of the facility on private land. Potential effects of the alternative livestock facility on adjacent property values is difficult to evaluate because some nearby property owners may like the idea of the expansion, whereas others might find it undesirable.

Some local residents may feel the alternative livestock operation would decrease their quality of life. Neighbors harboring negative feelings about the operation would perceive a loss in their sense of social well-being. However, some neighbors and local residents may like the idea of an alternative livestock facility and enjoy viewing the elk. These people may feel the facility would add to their quality of life.

Risk/Health Hazards

There is potential for transmission of water-borne disease pathogens, if present, to be transported into and out of the ranch, primarily from the ephemeral drainage on the north side of the alternative livestock site. This is expected to be a minor risk because of current animal disease testing requirements and lack of surface water flow from the site, except during conditions of significant precipitation events and snowmelt (spring runoff). The route of chronic wasting disease (CWD) transmission at this time is unknown; therefore, the potential for transmission by soil, water, or other media cannot be determined, nor impacts disclosed.

The risk of disease (e.g., brucellosis and tuberculosis) being passed from alternative livestock to wildlife and traditional livestock would be minimal if fence integrity is maintained and the stipulations and/or mitigation measures described in this EA are followed. Potential for disease transmission from ranch animals is also mitigated through DoL disease testing requirements. Each facility is required to have access to an isolation pen (quarantine facility) on the property or an approved quarantine plan to isolate any animals that are imported or become ill. Snow drift-prone areas along portions of the perimeter fence of the proposed enclosure have the potential to affect fence integrity. There is some risk of infection to hunters who field dress deer or elk infected with tuberculosis or brucellosis. Routine brucellosis and tuberculosis testing requirements for alternative livestock offer a measure of surveillance that minimizes that risk.

Cumulative Effects

The Proposed Action would add to impacts associated with the existing alternative livestock facility (license no. 132) located adjacent to the proposed facility. The existing operation is licensed for up to 200 elk on 38 acres. This facility, in combination with the proposed alternative livestock operation, could result in up to 600 alternative livestock (elk) on 120 acres in the Stillwater River Valley. The Spoklie Tobie Creek alternative livestock facility is located approximately 10 miles northwest of the BCD Land & Livestock site. The Proposed Action would result in potential impacts that are individually minor, but not cumulatively significant.

REQUIRED STIPULATIONS

One stipulation is listed in the *Prior Environmental Review and License* section of this EA that is part of license no. 132 for the existing 38-acre alternative livestock facility. This stipulation regarding the

reporting of ingress immediately to FWP would no longer be needed for the proposed expansion because it is addressed in current regulations. One stipulation would be imposed for the proposed expansion of the Tutvedt BCD alternative livestock facility regarding maintaining the perimeter fence in game-proof condition. This stipulation would apply to the existing 38-acre enclosure, as well as the proposed 82-acre enclosure.

1. If ingress or egress becomes a problem due to excessive snow accumulation or differential slope heights along the perimeter fence, fence height shall be increased in the identified problem.

The stipulation listed above is imposed to mitigate a potentially significant risk from potential ingress/egress of alternative livestock and wildlife due to fence height concerns from hillsides and potential snow accumulation. Some moderately steep (20 to 30 percent) slopes exist in the northeast and south-central portions of the proposed enclosure. Typically, winter snow depths in this area can reach several feet, but usually are 1 to 2 feet at any given time. Blowing and drifting snow can also increase packed snow depths. Excessive snow accumulation adjacent any fences will be plowed to reduce risk of ingress/egress. Without the requirements specified in the stipulation, risk to livestock and wildlife from contact with alternative livestock would have the potential to be significant, due to the site being located in an area currently utilized by wild game and predators.

RECOMMENDED MITIGATION MEASURES

- Employ one or more of the following best management practices (BMPs) to reduce odor problems if they occur: quickly incorporate accumulated waste into soil by plowing or disking as appropriate; spread waste during cool weather or in the morning during warm, dry weather; properly dispose of animal carcasses according to county solid waste regulations; carcasses and fecal matter should not be disposed of in or adjacent to water bodies, roads, or ditches; and, reduce stocking rate of alternative livestock.
- Maintain a reasonable stocking rate in the area to mitigate potential impacts from runoff and fecal matter. Potential water quality impacts also could be minimized by disposing of dead animals and excess fecal material at a site that is isolated from surface water and groundwater (disposal must meet county regulations for solid waste if applicable). On-site disposal of dead alternative livestock would be regulated by DoL under ARM 32.4.1002.
- For any areas that may have erosion and sedimentation problems, utilize best management practices (BMPs) where surface water could enter the Stillwater River. The BMPs may include earth berms, straw bale dikes, vegetative buffer zones, and/or silt fences to be used on a seasonal basis.
- Monitor the alternative livestock site for invasion of noxious weeds and treat affected areas in a timely manner. Should noxious weeds continue to be detected, a weed control program should be implemented, if not already in place, to control the weeds.
- Provide certified weed-free supplemental feed and minerals to the alternative livestock on a seasonal basis to reduce excessive grazing on preferred pasture plants.
- Create/utilize interior pastures such that rotational grazing strategies can be implemented to reduce adverse impacts to vegetation, minimize changes in soil structure, and potential increases in runoff and erosion to surface water drainages from disturbed ground.
- Store feed away from exterior fences or enclose in bear-resistant containers or buildings. Feed alternative livestock at interior portions of the enclosure and not along the perimeter fence.
- If excess noise from bugling during the rut results in substantial complaints, reduce the number

of bull elk and/or confine bulls to portions of the enclosure that are farthest from the nearest residential areas.

- Minimize risk of disease epidemic or heavy parasite infections among alternative livestock by maintaining a reasonable stocking rate in relation to the enclosure size, periodic removal of manure from concentration areas, and development of a disease immunization and parasite treatment protocol as applicable to alternative livestock.
- If archeological artifacts are observed during construction of the enclosure fence or from other activities, work should stop in the area and the discovery reported to the Montana Historical Society in Helena. If work stoppage in the area containing observed artifacts is not possible, record the location and position of each object, take photographs, and preserve the artifact(s).

SUMMARY OF PUBLIC COMMENTS AND FWP RESPONSES

Public comments for the expanded Tutvedt alternative livestock operation draft environmental assessment (EA) were accepted from August 10, 2000 until 5 pm August 31, 2000. FWP received 2 written comment submittals during the comment period. Substantive issues and questions raised during the comment period are summarized below, along with FWP and DoL responses. Public comments are considered substantive if they relate to inadequacies or inaccuracies in the analysis or methodologies used in the Draft EA, or identify new impacts or recommend reasonable new alternatives or mitigation measures, or involve disagreements or interpretations of impact significance. Comments, which express personal preferences or opinions on the proposal rather than on the evaluation itself, are not specifically addressed.

Comment Issue #1: Aesthetic result could be significant though EA states result is unknown

Response #1: Visual impact of the proposed alternative livestock fence was addressed in Section 11 (Aesthetics & Recreation) of the Draft EA. It acknowledges that "Some nearby residents may not appreciate having an 8-foot high fence to view." This is considered a minor impact, however, and does not require mitigation. Negative feelings about living near the alternative livestock facility are discussed in Section 9 (Community Impact) of the Draft EA.

Comment Issue #2: Against use of sportsmen's fees for private enterprise.

Response #2: The state legislature has established the funding mechanism for the alternative livestock program. Any changes to this system would need to come from the legislature. The funds are not used for promotion of, but rather regulation of the alternative livestock industry.

Comment Issue #3: Trace-back history of all introduced animals should be required.

Response #3: Regulations provide for trace-back history on all deer, elk, or other cervids either imported into Montana or acquired from sources within Montana.

Comment Issue #4: Double-fencing should be required for the perimeter fence at the alternative livestock facility.

Response #4: Fencing proposed by the applicant (Tutvedt) meets requirements specified by FWP in ARM 12.6.1531. Double-fencing could be required upon evidence that the fencing standards employed on the facility in question do not provide for a "game proof fence"

Comment Issue #5: Concerned about CWD and water-borne diseases.

Response #5: These issues are addressed in Section 8 (Risk/Health Hazards) of the Draft EA.

Comment Issue #6: The fenced enclosure would displace wildlife.

Response #6: Displaced wildlife is discussed in Section 5 (Fish & Wildlife) of the Draft EA.

Comment Issue #7: The number of animals proposed for the enclosure is too high for amount of land.

Response #7: Animal density and related impacts on soil, water, and vegetation are described in Section 1 (Land Resources), Section 3 (Water Resources), and Section 4 (Vegetation) of the Draft EA. The currently licensed 38-acre facility has been approved for up to 200 animals. The expansion would allow up to 600 animals on 120 acres. Mitigation measures require the maintenance of adequate vegetation cover to lessen impacts on existing soil, water and vegetation resources. Reasonable stocking rates are discussed in Sections 1-4 of the Draft EA.

Comment Issue #8: A more thorough EIS should be completed.

Response #8: As stated on page 1 of this Final EA, if FWP determines that a project would have a significant impact that cannot be mitigated to a minor impact, the agency will prepare a more detailed environmental impact statement (EIS) before making a decision. If the agency determines that a proposed project will not have a significant impact, or that the impact can be mitigated to minor or none, the agency may make its licensing decision based upon results of the EA and criteria established under Montana alternative livestock statute, Montana Code Annotated (MCA) Title 87, Chapter 4, Part 4. In the case of the proposed Tutvedt expansion, an EIS was deemed not necessary for the reasons described above. The potentially significant issue of ingress/egress is mitigated to a minor risk through fence monitoring requirements.

Comment Issue #9: Analysis of CWD is superficial.

Response #9: Comment noted. We believe, however, that sufficient information about CWD is provided in the Draft EA for purposes of evaluating the Proposed Action.

Comment Issue #10: Use of Montana elk antlers for export to the Asian Medicinal Market is inappropriate

Response #10: Comment noted

Comment Issue #11: Against the use of Montana elk for private benefit

Response #11: Comment noted

Comment Issue #12: Escape of hybridized animals will harm native wildlife

Response #12: Ingress and egress issues are discussed in Section 5 (Fish and Wildlife) of the draft EA. Additional measures to prevent ingress/egress are disclosed in the Stipulations and Mitigation Measures Section.

CONCLUSION OF THE EA

The Draft EA, as modified herein, and this Final EA are approved as the Final EA for the expanded Tutvedt's BCD Land & Livestock alternative livestock operation. The preferred alternative is the Proposed Action, modified with the requirements listed in this Final EA. Based on this review, it is determined that the Proposed Action with the requirements and recommended mitigation measures would not have a significant impact on the environment and that an EIS will not be required.

ANALYSIS OF IMPACT ON PRIVATE PROPERTY

Montana alternative livestock statutes (87-4-476, MCA) require that licenses may be denied or issued with stipulations to prevent unacceptable threat of escape of alternative livestock, and to prevent a significant threat to the safety of the general public and surrounding landowners by the shooting of alternative livestock animals. MEPA requires FWP to identify and analyze environmental impacts of the Proposed Action and potential mitigation measures. MEPA, as revised by Senate Bill 231 of 1995, also requires agencies to evaluate the impact on private property of regulatory actions, such as denial of a permit or establishment of permit conditions (75-1-201, MCA). The Environmental Quality Council (EQC) has established procedural guidelines to implement these requirements. The analysis provided in the Draft EA was prepared in accordance with implementation guidance issued by the EQC.

In addition, the Private Property Assessment Act (2-10-101, MCA, et seq.) requires agencies to determine whether proposed actions by the State of Montana have "taking or damaging implications", such as to constitute a deprivation of private property in violation of the United States or Montana constitutions and, if so, to perform an impact assessment to determine the likelihood that a state or federal court would hold that the action is a taking or damaging, to review alternatives, and to determine the estimated cost of compensation. In accordance with the Act, the attorney general has prepared guidelines, including a checklist, to assist agencies in identifying and evaluating actions with taking or damaging implications.

The Draft EA contains FWP's completed checklist with respect to the stipulations recommended in the preferred alternative and has found that the preferred alternative does not have taking or damaging implications and that an impact assessment is not required.

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